LIBRARY
ST BARTHOLOMEW'S

MONTHLY REPORT

ON

THE PROGRESS OF THERAPEUTICS.

Edited for the Edinburgh Medical Journal.

No. VIII.—April 1875.

BY

W. HANDSEL GRIFFITHS, Ph.D., L.R.C.P.E.,

Licentiate of the Royal College of Surgeons of Edinburgh; Corresponding Member of the Therapeutical Society of Paris; Hon. Member of the Ontario College of Pharmacy, etc.; Librarian to the Royal College of Surgeons in Ireland.

WELLCOME INSTITUTE
LIBRARY
Coll. WellMOmec
Coll.
No.

MONTHLY

REPORT ON THE PROGRESS OF THERAPEUTICS.

By W. HANDSEL GRIFFITHS, Ph.D., L.R.C.P. Ed.,

Licentiate of the Royal College of Surgeons of Edinburgh; Corresponding Member of the Therapeutical Society of Paris; Honorary Member of the Ontario College of Pharmacy, etc.; Librarian to the Royal College of Surgeons in Ireland.

(*Reprinted from the Edinburgh Medical Journal for April* 1875.)

Action of Cantharides.—Dr Cantieré draws the following conclusions from his experiments:—Cantharides causes the blood-corpuscles to become crenated; it lessens the blood-pressure by diminishing the contractile power of the heart and arteries; it quickens the pulse and raises the temperature; it causes hyperæmia and stasis, and, if the dose be large, true inflammation in various organs. It causes softening of the cerebellum and of the cord chiefly at the lumbar enlargement. At the base of the brain and medulla oblongata hyperæmia is well marked. It induces also hyperæmia or inflammation of the urinary and genital system. It acts as an aphrodisiac. Internally administered, it produces ulceration of the gastro-intestinal canal; when injected into the blood, if it does not produce ulceration, it will cause diarrhœa.—*La Sperimentale*, tomo 34, fasc. 9 and 10.

Treatment of Rheumatic Fever by Cynara.—In 1832 Dr E. Copeman, the present President of the British Medical Association, drew the attention of the profession to this subject (*Medical Gazette*). He has since then employed the extract and tincture of cynara, the common artichoke, for the treatment of rheumatism with more satisfactory results than afforded by any other means. In writing on the subject in the *British Medical Journal*, December 1874, he says, "No other medicine has in my experience appeared to be so efficacious as cynara in rheumatism acute or chronic, but I have frequently heard of its having failed in other hands, and I suspect

the reason is that it is often prepared from leaves gathered at an improper time when there is no medicinal virtue in the plant. The leaves should be gathered just before the top of the vegetable is fit for food and whilst they are full of juice; if left until the top is cut off for cooking purposes and the plant begins to wither, no good will be derived from it, and, if given, it would be condemned as useless and inert."

THE COMBINED ACTION OF ERGOT AND BORAX.—Borax is by some practitioners accredited with emmenagogue properties. Dr C. Brown, in cases where ergot is indicated, combines with a full dose of that drug equal proportions of borax, and finds that this combination is better borne and is more durable in its action than ergot alone.—*Trans. Med. Soc. Pennsylvania.*

PREPARATION OF ERGOTIN.—A preparation of ergotin suitable for subcutaneous injection has long been a desideratum, those in ordinary use being liable to cause pain and to produce abscesses. In a recent communication to the Berlin Medical Society, Wernich recommended the following method of preparing ergotin for hypodermic injection:—A watery extract is prepared from powdered ergot, which had been previously deprived of all fatty matter by ether, and then treated with alcohol. The watery extract is next purified by diffusion through parchment paper, and will form a clear brown solution in water.—*Allgemeine Medicin Centralzeitung*, Nos. 35 and 36.

JABORANDI.—M. Albert Robin recently communicated to the Société de Thérapeutique the result of his investigations as to the effect of this drug (*Gaz. Hebd.*, 24th Nov. 1874). He found that the urea and urine are at first diminished in quantity, but that after some days the quantity of these and of uric acid and chlorides is increased. Jaborandi seems to act on the vaso-motors, diminishing tension by paralyzing them and facilitating the passage of blood through the cutaneous capillaries. In cases in which it was given in minutely divided doses there was no sweating or salivation, but a copious diuresis.

MM. Ball and Hardy lately stated to the Société de Biologie that they have ascertained by experiment that the quantity of the urea excreted in the urine is always diminished under the influence of jaborandi, and that the sweat always contains a portion of urea; but on adding these two quantities, the total was (except in one case) always inferior to the amount excreted in the urine the day before the administration of the drug (*Gazette Med.*, 21st Nov. 1874).

Mr W. Martindale, F.C S., has an interesting paper on jaborandi in the *Pharmaceutical Journal*, 7th Nov. 1874. Dr S. Coutinho, he states, brought to Paris, from Pernambuco, a plant called "Jaborandi" by the Indians. This is a shrub which grows in the

interior of some provinces of the north of Brazil. We cannot yet say with certainty the plant and order yielding jaborandi. Prof. Baillon believes it to be identical with Pilocarpus pinnatifolius, N. O. Rutaceæ, and Prof. Oliver also believes it to be a rutaceous plant. Mr Martindale seems to think it possible that it may be the produce of one of the Piperaceæ, and certainly there is a species of pepper called jaborandi—the Piper jaborandi. With regard to the chemistry of this plant, M. Rabuteau finds that it contains an inert volatile principle, an inert substance, tasteless and soluble in water, and a substance with a bitter taste and soluble in alcohol, on which the effects of the drug depend. He did not find any alkaloid or definite active principle. The effects of jaborandi have been tried in this country by Prof. Sydney Ringer (*Practitioner*, December). In three out of four cases he found it to cause copious perspiration. In one case the skin remained quite dry. It acts as a sialagogue, sometimes causing a very great flow of salivary secretion; but its sialagogic action is less uniform than its diaphoretic action. In one case only did it increase the bronchial secretion. It accelerates the action of the heart, and renders the arterial impulse more visible. In each observation the temperature fell considerably. In all cases vomiting was excited, but with scarcely any nausea. It produced drowsiness, which supervened when the flush disappeared from the face and the skin became pale. The perspiration continued profuse long after the flush had left the face.

The dose of jaborandi is from 30 to 90 grs. of the powdered leaves, infused in boiling water, and taken without straining. M. Gubler states that it sometimes produces diarrhœa.

A leader in the *British Medical Journal* for 27th February gives an excellent summary of the facts concerning jaborandi which have been hitherto ascertained. Sphygmographic tracings show that jaborandi causes marked lowering of the systemic blood-pressure. Children are less susceptible to its action than adults, as noted by Ringer and Gould. In this particular, and in quickening the pulse and flushing the face, it resembles belladonna; but it exerts an opposite action to that drug in the salivary, sudoral, and mammary secretions, on the pupil, and on the minute arteries. Belladonna also tends to cause delirium, while jaborandi causes prostration and sleepiness. The influence of atropia on the salivary flow is due, according to Heidenhain's experiments, to paralysis of the terminations of the secretory filaments of the chorda tympani. Muscarin, as shown by Schmiedeberg and Koppe, is antagonistic to atropia in this respect, causing salivation by stimulating the secretory filaments of the chorda tympani, and jaborandi appears to act similarly. Tweedy has shown that the topical application of an extract of jaborandi causes contraction of the pupil and temporary myopia, due to spasm of accommodation. With regard to the therapeutical application of jaborandi, the writer suggests that it may do good service at the outset of acute febrile disorders, such

as simple pneumonia, when the skin is hot and pungent. It may also be useful in some forms of Bright's disease, when the arterial tension becomes high, and the skin cannot be made to act by hot-air baths. The depressant action of jaborandi on the heart should be remembered; it has been known to do harm in rheumatic fever, complicated by endocarditis. It may find a place in ophthalmic practice, and may prove an antidote to poisoning by belladonna. At a recent meeting of the Société de Thérapeutique, Professor Gubler brought forward some additional remarks concerning jaborandi. A large parcel of the leaves and wood has lately arrived in France. Gubler finds that 6 grammes of the bark are equal in power to 4 grammes of the leaves; he finds, also, that the black-coloured leaves are less active than the green. The drug sometimes produces vomiting, and the diaphoresis is sometimes replaced by diuresis. The sialagogue effects are sometimes so considerable as to cause great prostration. Jaborandi is indicated in anasarca and œdema met with in rheumatism, albuminuria, and diseases of the heart. In chronic bronchitis, and in emphysema with asthmatic paroxysms, jaborandi has yielded in Gubler's hands remarkably good results. He has also given it advantageously in subacute rheumatism.

Monobromide of Camphor.—In a former "Report" we alluded to Bourneville's experiments with this substance.

Monobromide of camphor was discovered by Swarts in 1862. It is a definite substance, in which an equivalent of the hydrogen of the camphor is replaced by one of bromine. In a paper by M. Gault, in *L'Union Pharmaceutique*, vol. xv. p. 266, the mode of preparing it is given in detail. It consists of hard crystalline acicular colourless prisms, with an odour of camphor and turpentine, and with a slightly bitter camphor-like taste. It is insoluble in water, but soluble in alcohol, fixed and volatile oils, ether, and chloroform. Dr Lawson, in a paper in the *Practitioner* for November, calls attention to the difficulty of finding a suitable form for administering this remedy. The elegant dragées of Dr Clin form probably the best method of administration. Each dragée contains 10 centigrammes ($1\frac{1}{2}$ grains), covered with a thin coat of sugar, which preserves the drug, masks its odour and flavour, and renders it easy of deglutition. The dose is not yet precisely ascertained; probably it would be from twenty centigrammes to a gramme, according to circumstances.

WELLCOME LIBRARY INSTITUTE

EDINBURGH: PRINTED BY OLIVER AND BOYD.